

Schematic Diagram, FM Tuner, Models N-731, N-732, N-942, N-944

FM TUNER SUB ASSEMBLY ALIGNMENT

(Perform I-F and detector alignment, before doing the following)

STEP	SWEEP GEN. FREQ.	SET DIAL TO	ADJUST	REMARKS
6	88MC (150KC sweep)	88MC	T1T (for max.)	Set VTVM on 1.2 VAC range. Adjust sweep generator for minimum antenna input signal to prevent overloading.
7	88MC (150KC sweep)	88MC	L1T (for max.)	Same as Step 6.
8	100MC (150KC sweep)	100MC	C4A (for max.) C4B (for max.)	Repeat Steps 6, 7, and 8 until no further improvement is obtained.

FM OSCILLATOR TRACKING ADJUSTMENT

(Alignment of oscillator is rarely necessary and should be undertaken only under conditions of severe misalignment.) Check to make sure that selector is in "FM" position.

STEP	SWEEP GEN. FREQ.	SET DIAL TO	ADJUST	REMARKS
1	88MC (150KC sweep)	88MC	T3T (for max.)	
2	100MC (150KC sweep)	100MC	C13T (for max.)	Repeat Steps 1 and 2 until correct tracking is obtained.

N-731, N-732, N-942, N-944

I-F AND DETECTOR ALIGNMENT, MODELS N-731, N-732, N-942 AND N-944

(Set selector switch to "FM" position, AFC off.)

EQUIPMENT	INITIAL SETTING	CONNECTION
Gen.	10.7MC, 150KC sweep	Grid of V3 (see base view) and ground.
VTVM	6 volt d-c range, "0" center	Ter. 3 of vol. control and ground.

STEP	OPERATION
1	Adjust top slug of T4 for 0 volt d-c reading.
2	Set VTVM to 1.2 VAC scale and peak bottom slug of T4 for maximum reading. (Insert tool through top slug.)
3	Connect generator to Pin 4 of T2 and ground (see base view). Tune bottom slug of T3 for maximum reading (insert tool through top slug).
4	Connect generator to antenna terminals through 300 ohm balanced input pad. Set generator to 100MC, 150KC sweep. Adjust front and back cores of T2T for maximum reading.
5	Repeat step #1 (using 1.2VDC, VTVM scale).

AM ALIGNMENT (AM-FM MODELS)

I-F Section

EQUIPMENT	SETTING	CONNECTION
AM-Gen.	455KC 30% Mod.	Connect output of generator through a .05 mfd capacitor to Pin 7 of V4 and low side to B-.
VTVM	1.2 VAC	Connect across speaker voice coil.

STEP	PROCEDURE
1	Adjust top slug of T3 for maximum output.
2	Adjust top, then bottom slugs of T2 for maximum output.

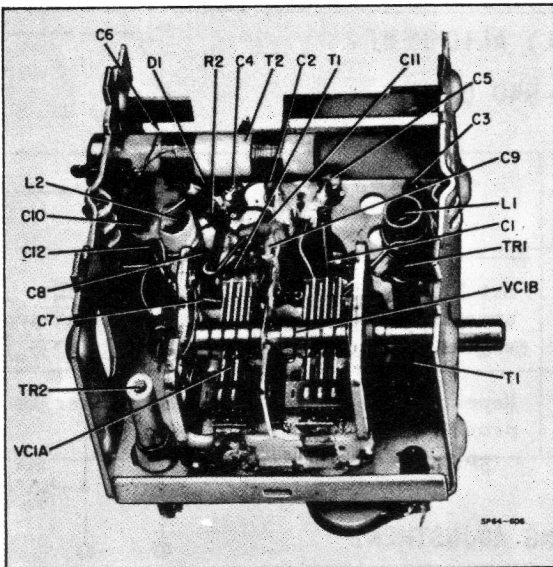
Oscillator Tracking

3	Completely open tuning gang - set generator to 1620KC, 30% modulation. Adjust C2A for maximum output as indicated.
4	Completely close tuning gang. Set generator to 535KC. Adjust core T1 for maximum output.
5	Repeat steps 3 and 4 until no further increase in output occurs.

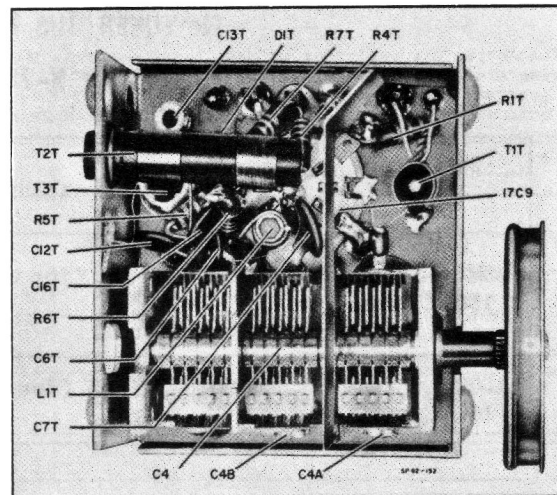
R-F Alignment

EQUIPMENT	SETTING	CONNECTION
AM Gen.	1500KC	Connect to 5 or 6 turn, 5-inch diameter radiating loop placed parallel to antenna.
VTVM	1 VAC	Connect across speaker voice coil.

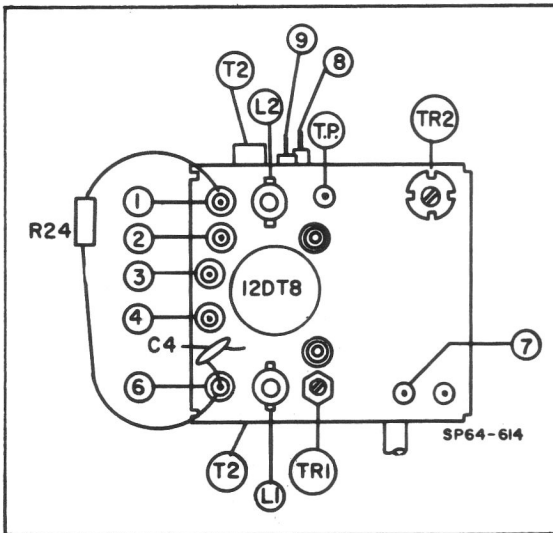
STEP	PROCEDURE
1	Tune receiver to 1500KC. and adjust C1A for maximum.



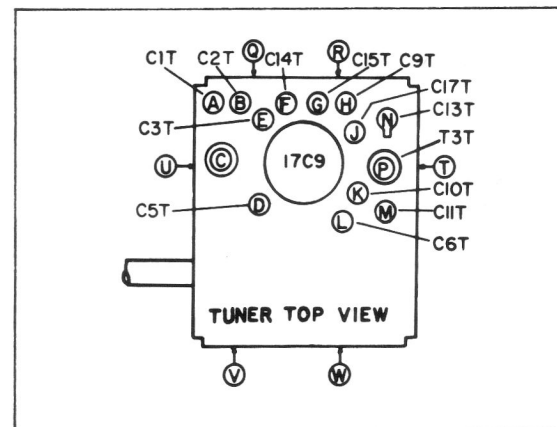
FM Tuner, Bottom View, Parts Location
 N-730, N-940



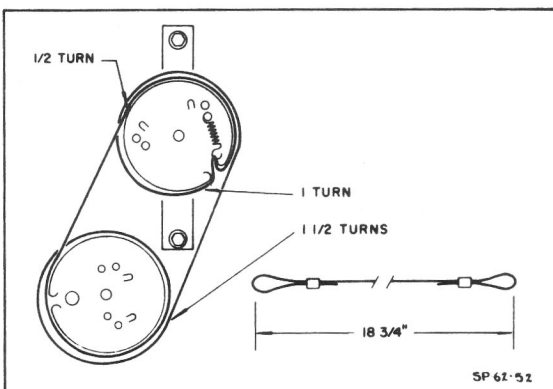
FM Tuner, Bottom View, Parts Location



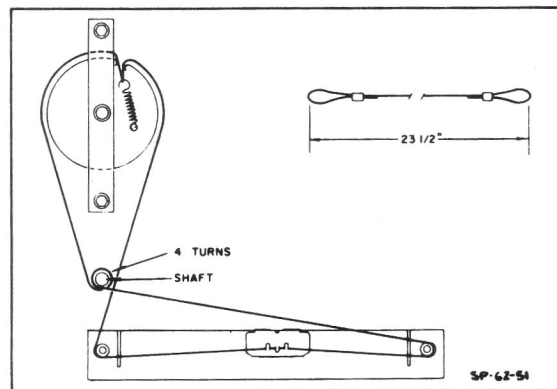
Alignment and Test Points
 Models N-730, N-940



Alignment and Test Points



Tuner Dial Cord Stringing
 N-731, N-732, N-942, N-944



Main Dial Cord Stringing
 Models N-731, N-732, N-942, N-944